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(g) License conditions. All authorizations in the radiodetermination satellite service shall be subject to the policies set forth in the Report and Order, including compliance with appendix D, and the Second Report and Order in General Docket Nos. 84–689 and 84–690 and to any policies and rules the Commission may adopt at the later date

[56 FR 24016, May 28, 1991, as amended at 59 FR 53327, Oct. 21, 1994]

## §25.142 Licensing provisions for the non-voice, non-geostationary mobile-satellite service.

(a) Space station application requirements. (1) Each application for a space station system authorization in the non-voice, non-geostationary mobilesatellite service shall describe in detail the proposed non-voice, non-geostationary mobile-satellite system, setting forth all pertinent technical and operational aspects of the system, and the technical, legal, and financial qualifications of the applicant. In particular, each application shall include the information specified in §25.114, except that in lieu of the information concerning orbital locations requested in §25.114(c)(6), the applicant shall specify the number of space stations and applicable information relating to the altitude(s), argument(s) of perigee, service arc(s), right ascension of ascending node(s), eccentricity, and inclination of the space stations (all referenced to the same time) that will comprise its system. Applicants must also file information demonstrating compliance with all requirements of this section, and showing, based on existing system information publicly available at the Commission at the time of filing, that they will not cause unacceptable interference to any nonvoice, non-geostationary mobile-satellite service system authorized to construct or operate.

(2) Applicants for a non-voice, nongeostationary mobile-satellite must identify the power flux density produced at the Earth's surface by each space station of their system in the frequency bands 137–138 MHz and 400.15–401 MHz, to allow determination of whether coordination with terrestrial services is required under international footnotes 599A and 647B of §2.106 of the Commission's Rules. In addition, applicants must identify the measures they would employ to protect the radio astronomy service in the 150.05–153 MHz and 406.1–410 MHz bands from harmful interference from unwanted emissions.

- (3) Emission limitations. (i) Applicants in the non-voice, non-geostationary mobile-satellite service shall show that their space stations will not exceed the emission limitations of §25.202(f) (1), (2) and (3), as calculated for a fixed point on the Earth's surface in the plane of the space station's orbit, considering the worst-case frequency tolerance of all frequency determining components, and maximum positive and negative Doppler shift of both the uplink and downlink signals, taking into account the system design.
- (ii) Applicants in the non-voice, non-geostationary mobile-satellite service shall show that no signal received by their satellites from sources outside of their system shall be retransmitted with a power flux density level, in the worst 4 kHz, higher than the level described by the applicants in paragraph (a)(2) of this section.
- (4) Financial qualifications. Each applicant for space station system authorization in the non-voice, non-geostationary mobile-satellite service must demonstrate, on the basis of the documentation contained in its application, that it is financially qualified to proceed expeditiously with the construction, launch and operation for one year of the first two space stations of its proposed system immediately upon grant of the requested authorization. Failure to make such a showing will result in the dismissal of the application. This showing shall include all information described in §25.140 (c), (d) and (e).
- (5) Replacement of space stations within the system license term. The licensee need not file separate applications to construct, launch and operate technically identical replacement satellites within the term of the system authorization. However, the licensee shall certify to the Commission, at least thirty days prior to launch of such replacement(s) that:

- (i) The licensee intends to launch a space station that is technically identical to those authorized in its system license, and
- (ii) Launch of this space station will not cause the licensee to exceed the total number of operating space stations authorized by the Commission.
- (b) Operating conditions. In order to ensure compatible operations with authorized users in the frequency bands to be utilized for operations in the nonvoice, non-geostationary mobile-satellite service, non-voice, non-geostationary mobile-satellite service systems must operate in accordance with the conditions specified in this section.
- (1) Service limitation. Voice services may not be provided.
- (2) Coordination requirements with Federal government users.
- (i) The frequency bands allocated for use by the non-voice, non-geo-stationary mobile-satellite service are also authorized for use by agencies of the Federal government. The Federal use of frequencies in the non-voice, non-geostationary mobile-satellite service frequency bands is under the regulatory jurisdiction of the National Telecommunications and Information Administration (NTIA).
- (ii) The Commission will use its existing procedures for liaison with NTIA to reach agreement with respect to achieving compatible operations between Federal government users under the jurisdiction of NTIA and non-voice, non-geostationary mobile-satellite systems (including service transceivers subject to blanket licensing under §25.115(d)) through the frequency assignment and coordination practices established by NTIA and the Interdepartment Radio Advisory Committee (IRAC). In order to facilitate such frequency assignment and coordination, applicants shall provide the Commission with sufficient information to evaluate electromagnetic compatibility with the Federal government use of the spectrum, and any additional information requested by the Commission. As part of the coordination process, applicants shall show that they will not cause unacceptable interference to authorized Federal government users, based upon existing system information provided by the Govern-

- ment. The frequency assignment and coordination of the satellite system with Federal government users shall be completed prior to grant of construction authorization.
- (iii) The Commission shall also coordinate with NTIA/IRAC with regard to the frequencies to be shared by those earth stations of non-voice, nongeostationary mobile-satellite service systems that are not subject to blanket licensing under §25.115(d), and authorized Federal government stations in the fixed and mobile services, through the exchange of appropriate systems information.
- (3) Coordination among non-voice, non-geostationary mobile-satellite service systems. Applicants for authority to establish non-voice, non-geostationary mobile-satellite service systems are encouraged to coordinate their proposed frequency usage with existing permittees and licensees in the non-voice, non-geostationary mobile-satellite service whose facilities could be affected by the new proposal in terms of frequency interference or restricted system capacity. All affected applicants, permittees, and licensees shall, at the direction of the Commission, cooperate fully and make every reasonable effort to resolve technical problems and conflicts that may inhibit effective and efficient use of the radio spectrum; however, the permittee or licensee being coordinated with is not obligated to suggest changes or reengineer an applicant's proposal in cases involving conflicts.
- (4) Safety and distress communications. Stations operating in the nonvoice, non-geostationary mobile-satellite service that are used to comply with any statutory or regulatory equipment carriage requirements may also be subject to the provisions of sections 321(b) and 359 of the Communications Act of 1934, as amended. Licensees are advised that these provisions give priority to radio communications or signals relating to ships in distress and prohibit a charge for the transmission of maritime distress calls and related traffic.
- (c) Reporting requirements. All operators of non-voice, non-geostationary mobile-satellite service systems shall, on June 30 of each year, file a report

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with the Common Carrier Bureau and the Commission's Laurel, Maryland field office containing the following information:

(1) A listing of any non-scheduled space station outages for more than thirty minutes and the cause(s) of such outages;

(2) A detailed description of the utilization made of the in-orbit satellite system. That description should identify the percentage of time that the system is actually used for domestic transmission, the amount of capacity (if any) sold but not in service, and the amount of unused system capacity; and

(3) Identification of any space stations not available for service or otherwise not performing to specifications, the cause(s) of these difficulties, and the date any space station was taken out of service or the malfunction identified.

[58 FR 68060, Dec. 23, 1993]

## §25.143 Licensing provisions for the 1.6/2.4 GHz Mobile-Satellite Service.

- (a) System License: Applicants authorized to construct and launch a system of technically identical non-geostationary satellite orbit satellites will be awarded a single "blanket" license covering a specified number of space stations to operate in a specified number of orbital planes.
  - (b) Qualification Requirements.
- (1) General Requirements: Each application for a space station system authorization in the 1.6/2.4 GHz mobile-satellite service shall describe in detail the proposed satellite system, setting forth all pertinent technical and operational aspects of the system, and the technical, legal, and financial qualifications of the applicant. In particular, each application shall include the information specified in §25.114.
- (2) Technical Qualifications: In addition to providing the information specified in paragraph (b)(1) of this section, each applicant shall demonstrate the following:
- (i) That the proposed system employs a non-geostationary constellation or constellations of satellites;
- (ii) That the proposed system be capable of providing mobile satellite services to all locations as far north as 70° latitude and as far south as 55° lati-

tude for at least 75% of every 24-hour period, *i.e.*, that at least one satellite will be visible above the horizon at an elevation angle of at least 5° for at least 18 hours each day within the described geographic area;

- (iii) That the proposed system is capable of providing mobile satellite services on a continuous basis throughout the fifty states, Puerto Rico and the U.S. Virgin Islands, U.S., *i.e.*, that at least one satellite will be visible above the horizon at an elevation angle of at least 5° at all times within the described geographic areas;
- (iv) That operations will not cause unacceptable interference to other authorized users of the spectrum. In particular, each application shall demonstrate that the space station(s) comply with the requirements specified in §25.213.
- (3) Financial Qualifications: Each applicant for a space station system authorization in the 1.6/2.4 GHz mobilesatellite service must demonstrate, on the basis of the documentation contained in its application, that it is financially qualified to meet the estimated costs of the construction and launch of all proposed space stations in the system and the estimated operating expenses for one year after the launch of the initial space station. Financial qualifications must be demonstrated in the form specified in §§ 25.140(c) and (d). In addition, applicants relying on current assets or operating income must submit evidence of a management commitment to the proposed satellite system. Failure to make such a showing will result in the dismissal of the application.
- (c) Replacement of Space Stations Within the System License Term. Licensees of 1.6/2.4 GHz mobile-satellite systems authorized through a blanket license pursuant to paragraph (a) of this section need not file separate applications to construct, launch and operate technically identical replacement satellites within the term of the system authorization. However, the licensee shall certify to the Commission, at least thirty days prior to launch of such replacement(s) that: